Monday, May 2, 2005	
04:00 – 06:00 pm	Pre-Registration – Hotel Atrium
05:00 – 07:00 pm	Exhibit Reception – Hotel Atrium

Tuesday, May 3, 2005		
07:00 – 08:00 am	**Registration/Continental Breakfast**	
08:00 – 08:10 am	Overview Week	Denise Ponchak, NASA Glenn Research Center
08:10 – 08:20 am	Welcome	Rich Christiansen, Deputy Director, NASA Glenn Research Center
Plenary Session – JPDO: Inter-Agency Cooperation for the Next Generation ATS Session Chair: Fred Messina, Sensis Corporation		
08:20 – 08:30 am	Opening Plenary Remarks	Fred Messina, Sensis Corporation
08:30 – 08:55 am	Director's Message on JPDO and the Future	Charlie Keegan, Director JPDO
08:55 – 09:20 am	Progress, Plans and Roadmap for Achieving User-Specific Shared Situational Awareness	Colonel David Rhodes, Lead JPDO IPT for User-Specific Situational Awareness
09:20 – 09:45 am	Industry Perspective on NGATS and JPDO	Jerry Thompson, Chairman, JTA
09:45 – 10:10 am	Progress, Plans, Roadmap for Establishing an Agile ATM	Doug Arbuckle, Lead JPDO IPT for Agile Air Traffic Management System
10:10 – 10:30 am	NCAT Oversight Committee -- Progress and Plans	Bo Bollinger, President, ATCA
10:30 – 11:00 am	**BREAK**	
Plenary Session – R&T Programs Session Chair: Denise Ponchak, NASA Glenn Research Center		
11:00 – 11:20 am	An Integrated Look at R&D Technologies Supporting Improved Air Transportation Capacity and Security Requirements	Robert Beard, Computer Sciences Corporation
11:20 – 11:40 am	An Overview, Current Status and Future Transformation Direction of NASA's CNS Research & Technology Activities	Konstantinos Martzaklis, NASA Glenn Research Center
11:40 – 12:00 pm	NASA Airspace Systems Overview	Robert Jacobsen, NASA Ames Research Center
12:00 – 01:00 pm	**LUNCH**	
Session A1 – Integrated CNS Systems and Architectures Session Chairs: Chris Daskalakis, DOT Volpe National Transportation Systems Center and Ann Tedford, Federal Aviation Administration		
01:00 – 01:25 pm	Developing a Model for Joint Infrastructure Investment	Michele Steinbach and Stephen Giles, The MITRE Corporation
01:25 – 01:50 pm	Continuing the Commitment to Capacity – Evolving the FAA Operational Evolution Plan	Gisele Mohler, Federal Aviation Administration
01:50 – 02:15 pm	Overview of the FAA's NAS Strategy Simulator	Lance Sherry, Bengi Mezhepoglu, George Mason University, Dan Goldner, Ventana Systems, Anne Yablonski and Dave Knorr, Federal Aviation Administration
02:15 – 02:40 pm	Analysis of Air Traffic Control Systems Interference Impact on Galileo Aeronautics Receivers	Massimiliano DeAngelis, AMS-Alenia Marconi Systems, Romano Fantacci, Simone Menci, University of Florence and Claudio Rinaldi, ENAV S.p.A.
02:40 – 03:05 pm	**BREAK**	
03:05 – 03:30 pm	Joint US – European Future Communications Operating Concept for 2015 to 2030	Gregg Anderson, Federal Aviation Administration, John Gonda, Patricia Chavez, Brian Hung and William Saumsiegle, The MITRE Corporation
03:30 – 03:55 pm	Global Communications, Navigation, and Surveillance Systems Program Progress and Plans	Chip Meserole, The Boeing Company
03:55 – 04:20 pm	An Integrated Global CNS System	Robert Crow, AirNav, Inc.
04:20 – 04:45 pm	The Single Integrated Airspace Approach to Global Airspace: One World - One Airspace - One Perception	William Laska, John Edwards, Dirk Caudill and Andrew Chrisman, SRS Technologies, Inc.

Tuesday, May 3, 2005		
Session A2 – Datalink Communications Systems Session Chair: Todd Donovan, Sensis Corporation		
01:00 – 01:25 pm	Testing and Validation of Second Generation ADS-B Equipment for ATC Surveillance	Chris Moody, The MITRE Corporation **(CANCELLED)**
01:25 – 01:50 pm	Aircraft Automatic Dependent Surveillance – Broadcast (ADS-B) Verification and Validation	Jimmy Krozel, Metron Aviation Inc. and Dominick Andrisani, Purdue University
01:50 – 02:15 pm	A Predictive Model of User Equipage Costs for Future Air Traffic Services and Capabilities: An Automatic Dependent Surveillance - Broadcast Example	Kent Hollinger, James Nickum, Doyle Peed and Todd Stock, The MITRE Corporation
02:15 – 02:40 pm	Strategic Applications of Controller-Assigned Airborne Separation (CAAS)	Elliott Simons and David Maroney, The MITRE Corporation
02:40 – 03:05 pm	**BREAK**	
03:05 – 03:30 pm	VHF Channel Occupancy Measurements over Core Europe	Johannes Prinz, Christoph Rihacek, Miodrag Sajatovic, Frequentis GmbH, Santiago Zazo, Universidad Politécnica de Madrid, Javier Lopez-Perez and Ivan Perez-Alvarez, Universidad de Las Palmas de Gran Canaria
03:30 – 03:55 pm	A Study on Mobility in VDL Modes 2 and 3	Robert Murawski, Steven Bretmersky, and Vijay Konangi, Cleveland State University
03:55 – 04:20 pm	Data Link Implementation Status	Kathleen Kearns, SITA
04:20 – 04:45 pm	ADLS Road Map, an Air Carrier Perspective	Mike Murphy, ATN Systems, Inc.
Session A3 – Navigation, System Demonstrations & Operations Session Chair: David Buchanan, NASA Glenn Research Center		
01:00 – 01:25 pm	Tailored Arrivals Joint Project	Craig Roberts, Airservices, Brad Cornell, Rob Mead, Boeing and Michael Watson, Alliance
01:25 – 01:50 pm	RNP-Based Parallel Instrument Approaches: Concepts and Benefits	Michael Mills and Suzanne Porter, The MITRE Corporation
01:50 – 02:15 pm	Integrated GPS/eLoran Systems	G. Linn Roth, Locus, Inc. and Mitchell Narins, Federal Aviation Administration
02:15 – 02:40 pm	Wide Area Augmentation System Engagement with Industry Practitioners	David Beering, Infinite Global Infrastructure, Don Hanlon and JoAnn Ford, Federal Aviation Administration
02:40 – 03:05 pm	**BREAK**	
03:05 – 03:30 pm	WAAS: The Cornerstone of the Future Navigation System	Waseem Naqvi, Raytheon
03:30 – 03:55 pm	Operational Results and Standardization Issues of Wide Area Multilateration Systems for Civil Air Traffic Control Purposes	Heinz Bartacek, Werner Langhans, Christian Scheiflinger, Johann Zemsky, Austro Control GmbH and Helmut Schreiber, Graz University of Technology
03:55 – 04:20 pm	Safe Flight 21 (SF-21): Broadcast Service System	Robert Strain, The MITRE Corporation
04:20 – 04:45 pm	How the System Wide Evaluation and Planning Tool (SWEPT) Can Support Air Traffic Management Decision-Making in the Eastern U.S.	Paul Rigterink and Ed Ellenberger, Computer Sciences Corporation

Tuesday, May 3, 2005		
Session A4 – Safety and Security Initiatives Impacting CNS Session Chair: Richard Reinhart, NASA Glenn Research Center		
01:00 – 01:25 pm	Evaluations of Host-Based Intrusion Prevention Systems (HIPS): Sana's Primary Response and Cisco's Cisco Security Agent	Edwin Coover and Duncan Thomson, The MITRE Corporation
01:25 – 01:50 pm	Digital Signatures for the Analogue Radio	Konrad Hofbauer, Graz University of Technology and Horst Hering, Eurocontrol
01:50 – 02:15 pm	An Elliptic Curve Based Authentication Protocol for Control-Pilot Data Link Communications	Dawit Getachew, Chicago State University and James Griner, NASA Glenn Research Center
02:15 – 02:40 pm	Information Security for the Aviation Community: A Personal Perspective	Ted Signore, The MITRE Corporation
02:40 – 03:05 pm	**BREAK**	
03:05 – 03:30 pm	Communications-Supported Concepts for Highjacked Aircraft	Thomas Mulkerin, Mulkerin Associates, Inc.
03:30 – 03:55 pm	Secure Key Management for NASA Space Communication	Aruna Balasubramanian, Sumita Mishra, CompSys Technologies, Inc. and Ramalingam Sridhar, State University of New York, Buffalo
03:55 – 04:20 pm	Communications Technology for Improved Aviation Security	Sam Farroha, Cheryl Resch, Gary Stoneburner, Gerry Preziotti and Robert Nichols, The Johns Hopkins University Applied Physics Laboratory
04:20 – 04:45 pm	SIP Based Communications in Netcentric Operations	Johannes Prinz, Wolfgang Kampichler, Christoph Kurth, Frequentis GmbH and Johannes Osrael, Information Systems Institute, Vienna University of Technology
Dinner Reception		
06:00 – 06:30 pm	**Cocktails in Atrium**	
06:30 – 07:30 pm	**Dinner in Ballroom**	
07:30 – 08:00 pm	**Featured Speaker - Gregg Maryniak, Executive Director, X PRIZE Foundation**	

Wednesday, May 4, 2005		
07:00 – 08:00 am	**Registration/Continental Breakfast**	
Plenary Session – Global Communications Initiatives Session Chair: Chris Wargo, Computer Networks & Software Inc.		
08:00 – 08:10 am	Opening Plenary Remarks	Chris Wargo, Computer Networks & Software Inc.
08:10 – 08:40 am	CPDLC & ADS-B in Europe – Alive and Kicking	Alex Wandels, Eurocontrol
08:40 – 09:10 am	The New Future Needs for CNS-ATM	Captain Joe Burns, United Airlines
09:10 – 09:40 am	Future Global Communications In Efficient Flight Path Management	Paul Mettus, Lockheed Martin Transportation and Security Solutions
09:40 – 10:10 am	Taking into Account the Airline Business Case in ATC Communications Development	Philip Clinch, SITA
10:10 – 10:30 am	**BREAK**	
Session B1 – CNS Research and Technology Development Session Chair: Art Feinberg, Intelligent Automation Inc.		
10:30 – 11:00 am	FASTE-CNS: A Tool for Performance Evaluation of CNS Technologies	Chris Dhas, Chris Wargo, Sachin Lal, Computer Networks & Software, Inc. and Mannu Khanna, Comptel Inc.
11:00 – 11:30 am	Applying Virtual Environment Testing to the Air Traffic Control Environment of 2015	Manuel Garcia, Michael Kocin and Gregory Musser, ViaSat, Inc.
11:30 – 12:00 pm	Channel Characterization in the 5 GHz Microwave Landing System Extension Band for Future Airport Surface Communications	Dave Matolak, Ohio University, Lawrence Foore, NASA Glenn Research Center and Rafael Apaza, Federal Aviation Administration
12:00 – 01:00 pm	**LUNCH**	
01:00 – 01:30 pm	Detroit Deicing Decision Support Tool	Jonathan Lee, Suzanne Chen and Anastasios Daskalakis, U.S. Department of Transportation
01:30 – 02:00 pm	ESCAN	David Meyers, Honeywell
02:00 – 02:30 pm	Beaming Bandwidth via Laser Communications	Mohsen Kavehrad and Belal Hamzeh, The Pennsylvania State University
02:30 – 03:00 pm	**BREAK**	
Workshop Session 1		
03:00 – 05:00 pm	Next Generation Airport Surface Communications	Rafael Apaza, Federal Aviation Administration, Dave Matolak, Ohio University and Todd Donovan, Sensis Corporation

Wednesday, May 4, 2005		
Session B2 – Airborne Internet Session Chair: James Meer, Microflight		
10:30 – 11:00 am	Airborne Internet CIE: Applications Abound	Ralph Yost, William J. Hughes FAA Technical Center
11:00 – 11:30 am	USAF Airborne Network	Larry Walker, Scott Air Force Base
11:30 – 12:00 pm	Low Cost High Bandwidth Peer-to-Peer Datalink	Bill McNary, AeroSAT
12:00 – 01:00 pm	**LUNCH**	
01:00 – 01:25 pm	Electronic Flight Bag Development at United Airlines	Joe Burns, United Airlines
01:25 – 01:50 pm	Low Cost Multi Mode Radios	Prasad Nair, PMI
01:50 – 02:15 pm	XML Compression and the Airborne Internet	Kirk Swanson and Jason Judt, Architecture Technology Corporation
02:15 – 02:40 pm	Onboard Data Networks and Security	Jean-Paul Moreau, Airbus
02:40 – 03:00 pm	**BREAK**	
Workshop Session 2		
03:00 – 05:00 pm	Airborne Internet Consortium Forum	James Meer, Microflight Inc, and Ralph Yost, Federal Aviation Administration
Session B3 – Avionics for System-Level Enhancements Session Chair: Ronald Stroup, Federal Aviation Administration		
10:30 – 11:00 am	A Logical Architecture for Future Avionics	Paul Ravenhill, Helios Technology LTD
11:00 – 11:30 am	Interference Cancellation Receiver	Minh Nguyen, The MITRE Corporation and Amir Zaghloul, Virginia Polytechnic Institute and State University
11:30 – 12:00 pm	Applying JTRS Architecture to Multi-Mode Digital Avionics	Michael Kocin, ViaSat, Inc.
12:00 – 01:00 pm	**LUNCH**	
01:00 – 01:30 pm	Increasing Needs for Modular Avionics in the CNS/ATM-Based Air Space	Gu Shimin, Chinese Aeronautic Radio and Electronics Research Institute
01:30 – 02:00 pm	Measurement of the Safety Impact of Installing ADS-B on General Aviation Aircraft at Embry-Riddle Aeronautical University	Steven Hampton and Richard Theokas, Embry-Riddle Aeronautical University
02:00 – 02:30 pm	UWB EMI To Aircraft Radios: Field Evaluation on Operational Commercial Transport Airplanes	Jay Ely, NASA Langley Research Center, Warren Martin, NASA Jet Propulsion Laboratory, Timothy Shaver, Federal Aviation Administration, Gerald Fuller, Eagles Wings Inc., John Zimmerman, Robert Fuschino, United Airlines and William E. Larsen, FAA Moffett Federal Airfield
02:30 – 03:00 pm	**BREAK**	
Workshop Session 3		
03:00 – 05:00 pm	Aeronautical Data Link: Air Traffic Implementation in the Domestic US	Mike Murphy, ATN Systems Inc. and Ann Tedford, Federal Aviation Administration

Wednesday, May 4, 2005		
Session B4 – SWIM **Session Chair: Rafael Apaza, Federal Aviation Administration**		
10:30 – 11:00 am	The Federal Aviation Administration (FAA) System Wide Information Management (SWIM) Program	John Loynes, Federal Aviation Administration
11:00 – 11:30 am	Common Messaging for Aeronautical Systems	Paul Comitz, The Boeing Company
11:30 – 12:00 pm	Aspects of Sharing Flight Data via SWIM	Jon Dehn, Lockheed Martin Transportation & Security Solutions and Sid Rudolph, IT Consulting Group
12:00 – 01:00 pm	**LUNCH**	
01:00 – 01:25 pm	A Mobile Communications Network Architecture (MCNA) to Support the Extensions of System Wide Information Management (SWIM) to the Aircraft	David Morse, Avaliant LLC and James Budinger, NASA Glenn Research Center
01:25 – 01:50 pm	Service Oriented Architecture (SOA) Enables an Agile National Airspace System - SWIM Provides the Pipeline	Josh Hung, Federal Aviation Administration
01:50 – 02:15 pm	Technologies for Network-Enabled Operations (TNEO)	Brian Glass and Jack Levine, NASA Ames Research Center
02:15 – 02:40 pm	The Business Case for SWIM	Steve Glickman, The Boeing Company
02:40 – 03:00 pm	**BREAK**	

Thursday, May 5, 2005		
07:00 – 08:00 am	**Registration/Continental Breakfast**	
Session C1 – Weather Products and Data Dissemination Technologies Session Chairs: Michael Jarrell, NASA Glenn Research Center and Thomas Tanger, Ohio Aerospace Institute		
08:00 – 08:30 am	An Integrated Real-Time Turbulence Avoidance Decision-Aid for Pilots, Dispatchers, and Controllers	Paul Robinson, AeroTech Research, Inc.
08:30 – 09:00 am	In-Service Evaluation of a Prototype Turbulence Auto-PIREP System	Jason Prince and Paul Robinson, AeroTech Research, Inc.
09:00 – 09:30 am	Characterizing Satellite-Based Communications to Provide Seamless and Effective Transoceanic Data Dissemination	Rich Slywczak and Okechukwu Mezu, NASA Glenn Research Center
09:30 – 10:00 am	Flight Testing of Weather Data Exchange Using the 1090 Extended Squitter (1090ES) and VDL Mode 3 Data Links	James Griner, NASA Glenn Research Center
10:00 – 10:30 am	**BREAK**	
10:30 – 11:00 am	WINCOMM UAT Laboratory Test Activities	Wayne Buhrman, The John Hopkins University
11:00 – 11:30 am	WINCOMM UAT Laboratory Test Results and Flight Test Plans	Randall Sleight and Wayne Buhrman, The John Hopkins University
11:30 – 12:00 pm	Comprehensive Real-Time Analysis of Broadcasting Systems (CRABS) Software Use for Weather Information Communication (WINCOMM) Project	Thomas Spriesterbach and Stephen Giguere, The John Hopkins University
12:00 – 01:00 pm	**LUNCH**	
01:00 – 01:30 pm	Potential IP Solutions for Networking Selected FAA Weather Systems	Ezra Jalleta, Minqi Liu and Mark Simons, The MITRE Corporation
01:30 – 02:00 pm	A 4D Flight Profile Server and Probability-Based 4D Weather Objects: Toward a Common-Core TFM Toolset for the NAS	Alexander Klein, George Mason University
02:00 – 02:30 pm	Air Traffic Management Decision Support Using Integrated Methods of Diagnosing and Forecasting Aviation Weather	Tenny Lindholm, The National Center for Atmospheric Research
02:30 – 03:00 pm	**BREAK**	
Workshop Session 4		
03:00 – 05:00 pm	Role of Multi-Mode Multi-Function Digital Avionics in the Future NAS	Chris Wargo, Computer Networks & Software Inc. and Mike Harrison, Aviation Management Associates, Inc.

Thursday, May 5, 2005		
07:00 – 08:00 am	**Registration/Continental Breakfast**	
Session C2 – Airspace Communications Networks Session Chair: Cal Ramos, NASA Glenn Research Center		
08:00 – 08:30 am	FAA/Eurocontrol Future Communications Study Overview and Status	James Eck, Brent Phillips, Gregg Anderson, Rhonda Thomas, Federal Aviation Administration, James Budinger, NASA Glenn Research Center, Ron Bruno and Glenn Dyer, ITT Industries
08:30 – 09:00 am	Systems Methodology to Defining Surface ICNS Network Architecture	Thanh Nguyen, Analex Corporation
09:00 – 09:30 am	Integration of Airport Surface Communication Systems	Yang Wang, Lockheed Martin Transportation & Security Solutions and Yiyuan Zhao, University of Minnesota
09:30 – 10:00 am	Architectural and Protocol Assessment for Optical Networks Deployed on Commercial Avionic Communication Systems	Hung Nguyen, NASA Glenn Research Center
10:00 – 10:30 am	**BREAK**	
10:30 – 11:00 am	Adjustable Range Broadcast for Desired Airborne Network Connectivity	Yiyuan Zhao, University of Minnesota and Yang Wang, Lockheed Martin Transportation & Security Solutions
11:00 – 11:30 am	A Hierarchical IP Addressing Scheme for Mobile Ad-Hoc Networks	Hussein Ali, David Smith and Herman Helgert, George Washington University
11:30 – 12:00 pm	Evaluation of IPv6 Services for Future Aviation Networks	Anil Kumar, Aniket Bhat, Computer Networks & Software Inc. and Manu Khanna, Comptel, Inc.
12:00 – 01:00 pm	**LUNCH**	
01:00 – 01:30 pm	NASA Request for Comments on Global Air Space System Requirements	Will Ivancic, NASA Glenn Research Center
01:30 – 02:00 pm	Defining Command, Control, and Communications for Unmanned Aircraft Systems	Mike Schultz, Modern Technology Solutions Incorporated and Stephen Henriksen, ITT Advanced Engineering & Sciences
02:00 – 03:00 pm	**BREAK**	
Workshop Session 5		
03:00 – 05:00 pm	Potential Roles for Satellite Communications in Air Traffic Management	Israel Greenfeld, NASA Glenn Research Center

Thursday, May 5, 2005		
07:00 – 08:00 am	**Registration/Continental Breakfast**	
Session C3 – Surveillance Systems Session Chair: Len Carlson, Technology Services Corporation		
08:00 – 08:30 am	Departure Exclusion Zone – Monitoring System Concept	Carmine Primeggia, Federal Aviation Administration and Philip Hodgkins, BAE Systems
08:30 – 09:00 am	Wake Vortex Tracking Using a 35 GHz Pulsed Doppler Radar	Robert Neece, NASA Langley Research Center, Charles Britt, Joseph White, Chi Nguyen, RTI International, Ashok Mudukutore and Bill Hooper, Phase IV Systems, Inc.
09:00 – 09:30 am	X-Band Radar: More Than a Source for Airborne Weather	Steven Harrah, NASA Langley Research Center
09:30 – 10:00 am	The Right Surveillance Backup for ADS-B	Leslie Crane, The MITRE Corporation
10:00 – 10:30 am	**BREAK**	
10:30 – 11:00 am	Applications of a Surveillance Database and Server -- An Example of Positive Cost-Benefit for Networking Surveillance Data	Scott Remillard, Greg Berkebile and Todd Pittman, Sensis Corporation
11:00 – 11:30 am	Flight State Estimation from Surface Surveillance	Laurel Stell, Ted Carnoil, Metron Aviation Inc., Sandy Lozito, NASA Ames Research Center and Ved Sud, Federal Aviation Administration
11:30 – 12:00 pm	Enhancements in Wide Area Multilateration Processing Techniques	Jeffrey Beyer, Sensis Corporation
12:00 – 01:00 pm	**LUNCH**	
01:00 – 01:30 pm	The Standalone Traffic Information Service (TIS) Server	Jeffrey Beyer and Andrew Hepp, Sensis Corporation
01:30 – 02:00 pm	Short Range Surveillance Link for Close Proximity Navigation During Closely Spaced Parallel	Pavan Reddy and Mary Ellen Miller, Raytheon Company
02:00 – 02:30 pm	Three-Dimensional ISAR Image Reconstruction Technique with Multiple Receivers	Andon Lazarov and Chavdar Minchev, Burgas Free University
02:30 – 03:00 pm	**BREAK**	
Workshop Session 6		
03:00 – 05:00 pm	Aviation Spectrum Needs and Challenges	Larry Foore, NASA Glenn Research Center and Dave Matolak, Ohio University